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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/705,776	OSHIMA, MITSUAKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jaison Joseph	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 08/14/2006.
2. ☒ The allowed claim(s) is/are 44 - 91 renumbered as 1 - 48 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/379,746.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: Claims 44 – 91 are allowable over the prior art of record.

The prior art of record failed to teach a signal transmission apparatus for transmitting a first data stream and a second data stream, said signal transmission apparatus comprising: a modulator operable to modulate the first data stream according to an m-level PSK and modulate the second data stream according to an n-level PSK to produce first and second modulated signals; a converter operable to convert the first and second modulated signals into first and second converted signals according to Orthogonal Frequency Division Multiplexing and a transmitter operable to transmit the first and second converted signals, wherein the second converted signal has an effective symbol part and a guard interval, and the first data stream has an interval data including information of the guard interval of the second converted signal as cited in the independent claim 44 and similarly claimed in independent claims 48, 60, 64, 68, 72, and 84. Thus claims 44-51, 60 – 75, and 84 – 87 are novel and unobvious over prior art of record.

The prior art of record failed to teach a signal receiving apparatus for receiving a first converted signal which is a first modulated signal converted according to Orthogonal Frequency Division Multiplexing and a second converted signal which is a second modulated signal converted according to Orthogonal Frequency Division Multiplexing, said signal receiving apparatus comprising: a converter operable to convert the received first and second converted signals into the first and second

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modulated signals; wherein the second converted signal has an effective symbol part and a guard interval, first modulated signal has information of a first data stream and the second modulated signal has information of a second data stream, the first modulated signal is an m-level PSK modulated signal, the second modulated signal is an n-level PSK modulated signal, and the first data stream has an interval data including information of the guard interval of the second converted signal and a demodulator operable to demodulate the first and second modulated signals to produce the first data stream and the second data stream, wherein the second data stream is produced according to the interval data as claimed in independent claim 52 and similarly claimed in independent claims 56, 76, 80 and 88. Therefore claims 52 –59, 76 – 83, and 88 –91 are novel and unobvious over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

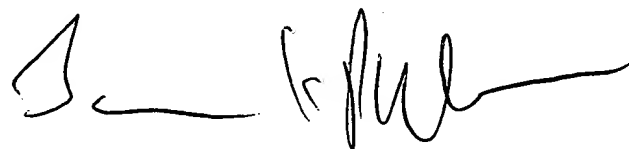
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison Joseph whose telephone number is (571) 272-6041. The examiner can normally be reached on M-F 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jaison Joseph  
10/26/2006

A handwritten signature in black ink, appearing to read 'Jay K. Patel', with a long horizontal stroke extending to the right.

**JAY K. PATEL**  
**SUPERVISORY PATENT EXAMINER**